

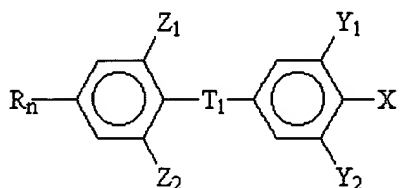
Appendix A2: Amended Abstract with Markings to Show Changes Made

ABSTRACT

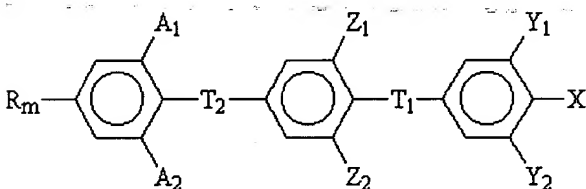
New tolane and bis-tolane compounds:

Deleted: A new class of liquid crystal compounds is based on

Deleted: structures



(Structure IV)



(Structure V)

in which X is F (fluoro), CN (cyano), OCF₃ (trifluoromethoxy), or NCS (isothiocyanate)

at least one of the pairs Y₁ and Y₂, Z₁ and Z₂, and A₁ and A₂ are fluoro groups.

T₁ for the tolanes is a triple bond. For the bis-tolanes, T₁ and T₂ are either both triple

bonds or one of the two groups is a double bond.

R_n or R_m may be an alkyl group, an alkenyl group, an alkoxy group, or an alkenoxy

group. For the tolane compounds, R_n may be a ;

Deleted: a polar group such as

Deleted: of sites

Deleted: for the bis-tolane derivatives,

Deleted: derivatives

Deleted: always

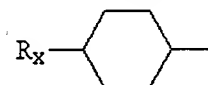
Deleted: derivatives,

Deleted: with and the other remains a triple bond

Deleted: having the general formula C_nH_{2n+1}Deleted: having the general formula C_nH_{2n-1}Deleted: having the general formula OC_nH_{2n+1}Deleted: the general formula -OC_nH_{2n-1}

Deleted: Additionally, f

Deleted: cyclohexyl substituent

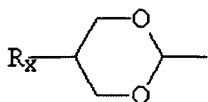


Deleted:

Deleted: (Structure VI)

dioxane substituent:

Deleted: or a



(Structure VII)

in which R_x may be as R_n or R_m above,

Deleted: is an alkyl group having the general formula C_xH_{2x+1}, an alkenyl group having the general formula C_xH_{2x-1}, an alkoxy group having the general formula OC_xH_{2x+1}, or an alkenoxy group having the general formula OC_xH_{2x-1}

These compounds exhibit useful nematic ranges and melting points. Also disclosed are eutectic mixtures including these compounds.